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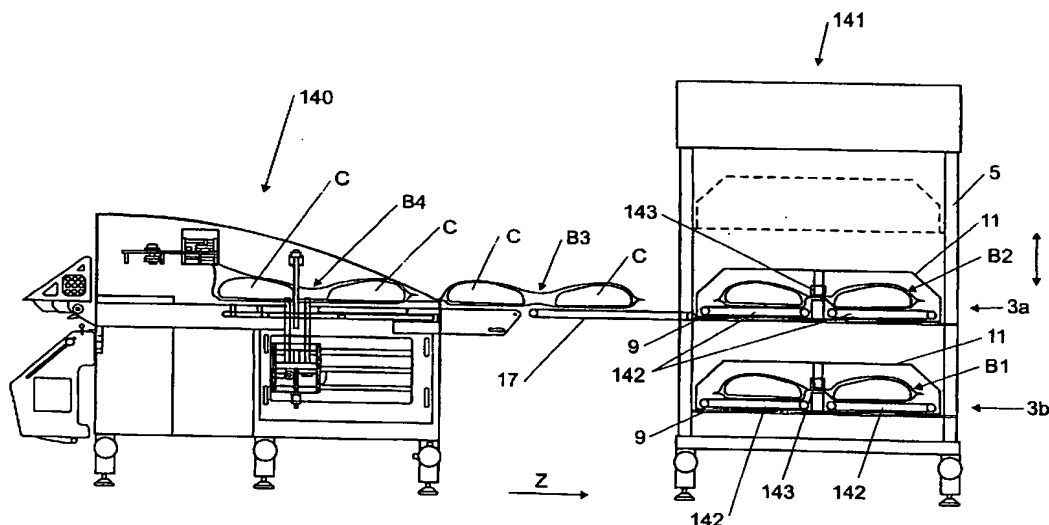
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(54) Title: VACUUM PACKAGING MACHINE FOR PRODUCT PACKAGES WITH MULTIPLE PRODUCTS



(57) Abstract: A vacuum packaging machine (141) and a conveyor (17) to deliver a product package from an upstream station (40) to a position adjacent a vacuum chamber (3a). The conveyor (17) has a longitudinal direction defined by the direction of travel of the product package. The vacuum chamber has a heat sealing and cutting assembly (143) oriented transversely to the longitudinal direction of the conveyor and in a position with sufficient spacing between end walls of the vacuum chamber and the assembly (143) for the product package containing two or more products to be loaded into the vacuum chamber (3a) with at least one product located in front of the heat sealing and cutting assembly and at least one other product located behind the heat sealing and cutting assembly. The heat sealing and cutting assembly (143) seals and cuts between two products to form two separate evacuated packages.



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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/NZ2003/000287**

## A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. <sup>7</sup>: **B65B 31/02**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
**DWPI IPC B65B 25/06, 31/-, 51/- and keywords: vacuum, evacuate, two, plurality, multiple, more, dual, cut, sever and similar terms.**

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 2003/072438 A1 (SEALED AIR (NZ) LIMITED) 4 September 2003 See whole document.	1-17, 20-45, 48-61
A	WO 2001/056888 A1 (PTS SRL) 9 August 2001 See whole document	1-61
A	US 5682727 A (HARTE et al) 4 November 1997 See whole document	1-61

☒ Further documents are listed in the continuation of Box C ☒ See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 3404451 A1 (MULTIVAC SEPP HAGGENMÜLLER KG) 14 August 1985 See whole document	1-61
A	US 3872644 A (GIRAUDI et al) 25 March 1975 See whole document	1-61

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member				
WO	03072438	NIL					
WO	0156888	AU	44113/01	IT	MI20000187	US	2001011445
US	5682727	NIL					
DE	3404451	EP	0186664	WO	8503487		
US	3872644	NIL					
Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.							
END OF ANNEX							